IN THE CLAIMS

For the convenience of the Examiner all pending claims of the present Application are shown below whether or not an amendment has been made. Claims 1, 6, 8, 14, 16-19, 22-25, 27-29, 33, 37-38, 41-43, and 47 are amended. Claims 4-5, 21, 30-32, 34-36, 40, and 44-46 are cancelled. Applicant submits that no new matter has been added with these amendments. Please amend the claims as follows:

1. **(Currently Amended)** A synchronous bus for a telecommunications node, the bus comprising:

a frame repeating at a defined interval;

each frame comprising ~~of~~ a plurality of service channels;

a first plurality of service channels ~~service channel~~ in at least one frame each ~~individually~~ transporting traffic for a DS-0 connection, every service channel in the first plurality of service channels comprising a current channel associated signaling (CAS) value for the DS-0 connection; and

a ~~set~~ second plurality of service channels in the frame together transporting an asynchronous transfer mode (ATM) cell.

2. **(Original)** The bus of Claim 1, wherein the defined interval comprises 125 microseconds and each service channel is two bytes in size.

3. **(Original)** The bus of Claim 1, further comprising:

a point-to-point link between each line card and a switch core of a telecommunications node; and

each point-to-point link comprising the frame repeating at the defined interval.

4. **(Cancelled)**

5. **(Cancelled)**

6. **(Currently Amended)** The bus of Claim 1, the ~~set~~ second plurality of service channels further comprising a block of contiguous service channels.

7. **(Original)** The bus of Claim 6, wherein the defined interval comprises 125 microseconds, each service channel is two bytes in size, and the block of contiguous service channels comprise 27 service channels.

8. **(Currently Amended)** The bus of Claim 1, the ~~set~~ second plurality of service channels comprising a first set of service channels, further comprising a second set of service channels together transporting traffic for an integrated services digital network (ISDN) connection.

9. **(Original)** The bus of Claim 8, the second set of service channels further comprising a block of contiguous service channels together transporting two B-channels and a D-channel of the ISDN connection.

10. **(Original)** The bus of Claim 9, wherein the defined interval comprises 125 microseconds and each service channel is two bytes in size.

11. **(Original)** The bus of Claim 1, further comprising:

each frame further comprising an overhead portion;

the overhead portion comprising an internode communication channel; and

the internode communication channel in at least one frame transporting control traffic generated by a line card of a telecommunications node transmitting the frame and destined for a disparate element of the telecommunications node.

12. **(Original)** The bus of Claim 11, wherein the disparate element of the telecommunications node comprises a disparate line card.

13. **(Original)** The bus of Claim 11, wherein the disparate element of the telecommunications node comprises a switch card.

14. **(Currently Amended)** A telecommunications node, comprising:

a line card operable to:

generate a frame ~~including~~ comprising a plurality of service channels each sized to individually transport DS-0 traffic ~~and in connection with other service channels to transport an ATM cell,~~

~~to~~ insert DS-0 traffic into a first plurality of service channels in the frame, every service channel in the first plurality of service channels comprising a current channel associated signaling (CAS) value for a DS-0 connection;

insert asynchronous transfer mode (ATM) cells into a second plurality of service channels in the frame;

~~and ATM cells into the service channels and~~

~~and to~~ repeat the frame at a defined interval on a synchronous bus; and

~~the~~ a switch core operable to receive the frame from the synchronous bus and to synchronously switch the DS-0 traffic and the ATM cells.

15. **(Original)** The telecommunications node of Claim 14, further comprising the line card operable to repeat the frame on a point-to-point link between the line card and the switch core.

16. **(Currently Amended)** The telecommunications node of Claim 14, wherein each service channel is sized to transport in connection with ~~other~~ a third plurality of service channels ~~the~~ integrated services digital network (ISDN) ~~ISDN~~ traffic, further comprising:

the line card operable to insert ~~integrated services digital network (ISDN)~~ the ISDN traffic into the third plurality of service channels in the frame; and

the switch core operable to synchronously switch the ISDN traffic.

17. **(Currently Amended)** The telecommunications node of Claim 14, wherein each frame of the bus comprises an overhead portion including an internode communication channel further comprising:

the line card operable to:

generate control traffic destined for a disparate element of the telecommunications node; ~~, to~~

insert the control traffic into the internode communication channel of a frame; and

~~to~~ transmit the frame to the switch core; and

the switch core operable to switch the control traffic to the ~~destination~~ disparate element based on the position of the control traffic in the internode communication channel.

18. **(Currently Amended)** A method for communicating traffic between elements in a telecommunications node, comprising:

repeating a frame at a defined interval on a synchronous bus,

providing a plurality of service ~~channel~~ channels in each frame;

in at least one frame, ~~individually~~ each transporting traffic for a DS-0 connection in a ~~single service channel~~ first plurality of service channels, every service channel in the first plurality of service channels comprising a current channel associated signaling (CAS) value for the DS-0 connection;

in the frame, transporting an asynchronous transfer mode (ATM) cell in a ~~set~~ second plurality of service channels; and

synchronously switching the DS-0 traffic and the ATM cell in the frame.

19. **(Currently Amended)** The method of Claim 18, wherein ~~the~~ each service channel is two bytes in size, further comprising repeating the frame at 125 microsecond intervals.

20. **(Previously Presented)** The method of Claim 18, wherein the synchronous bus comprises a point-to-point link, further comprising repeating the frame at a defined interval on a point-to-point link.

21. **(Cancelled)**

22. **(Currently Amended)** The method of Claim 18, wherein the second plurality of service channels comprise a block of contiguous service channels. ~~further comprising transporting the ATM cell in a block of contiguous service channels.~~

23. **(Currently Amended)** The method of Claim 18, further comprising transporting traffic for an integrated services digital network (ISDN) connection in a ~~second set~~ third plurality of service channels of the frame.

24. **(Currently Amended)** The method of Claim 18, further comprising:

providing in each frame an overhead portion including an internode communication channel;

generating control traffic at a line card of ~~a~~ the telecommunications node;

inserting the control traffic into an internode communication channel of a frame;

transmitting the frame from the line card to a switch core of the telecommunications node; and

synchronously switching the control traffic at the switch core to a destination element in the telecommunications node based on a position of the control traffic in the internode communication channel.

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25. **(Currently Amended)** A telecommunications signal transmitted on a synchronous bus of a telecommunications node, comprising:

a frame transmitted in a 125 microsecond interval;

the frame comprising a plurality of service channels;

a first plurality of service channels each ~~service channel individually~~ transporting traffic for a DS-0 connection, ~~the~~ every service channel in the first plurality of service channels comprising ~~including~~ a current channel associated signaling (CAS) value for the DS-0 connection; and

a second plurality of ~~a block of contiguous~~ service channels together forming a block of contiguous service channels transporting an asynchronous transfer mode (ATM) cell, the block of contiguous service channels located at a position in the frame associated with a destination element for the ATM cell.

26. **(Original)** The telecommunications signal of Claim 25, the frame further comprising an overhead portion including an internode communication channel, the internode communication channel comprising:

control traffic generated by a line card transmitting the frame; and

the control traffic located at a position in the internode communication channel associated with a destination element for the control traffic.

27. **(Currently Amended)** The telecommunications signal of Claim 25, a ~~set~~ third plurality of service channels in the frame together transporting traffic for an integrated services digital network (ISDN) connection.

28. **(Currently Amended)** The telecommunications signal of Claim 27, the ~~set~~ third plurality of service channels comprising a block of contiguous service channels together transporting two B-channels and a D-channel of the ISDN connection.

29. **(Currently Amended)** A line card for a telecommunications node, comprising:

a port operable to receive traffic from an external link;

an internal interface operable to connect to a point-to-point link of a synchronous bus; and

a traffic processor operable to:

generate a frame comprising an overhead portion having an internode communication channel and a service traffic portion comprising a plurality of service channels, the plurality of service channels each sized to individually transport DS-0 traffic; ~~,to~~

generate control traffic destined for a disparate element in the telecommunications node; ~~,to~~

insert the control traffic into a slot in the internode communication channel associated with the disparate element; ~~,to~~

~~insert traffic received at the port into the service channels; and to~~

insert DS-0 traffic received at the port and a current channel associated signaling (CAS) value for the DS-0 traffic into every one of a first plurality of service channels in the frame;

insert an asynchronous transfer mode (ATM) cell received at the port into a second plurality of service channels in the frame associated with the disparate element for the ATM cell within the telecommunications node; and

transmit the frame on the point-to-point link of the synchronous bus.

30. **(Cancelled)**

31. **(Cancelled)**

32. **(Cancelled)**

33. **(Currently Amended)** The line card of Claim 29, wherein the traffic processor is further operable to insert integrated services digital network (ISDN) traffic into a ~~set~~ third plurality of service channels in the frame.

34. **(Cancelled)**

35. **(Cancelled)**

36. **(Cancelled)**

37. **(Currently Amended)** A system for communicating traffic between elements in a telecommunications node, comprising:

a computer-readable medium; and

software stored on the computer-readable medium, the software operable to:

repeat a frame at a defined interval on a synchronous bus; ~~, to~~

provide a plurality of service channels in each frame, the plurality of service channels each sized to individually transport DS-0 traffic; ~~, to~~

transmit, in at least one frame, traffic for a DS-0 connection in a ~~single service channel~~ first plurality of service channels, every service channel in the first plurality of service channels comprising a current channel associated signaling (CAS) value for the DS-0 connection; ~~, to~~

transmit in the frame an asynchronous transfer mode (ATM) cell in a second plurality ~~set~~ of service channels; and ~~to~~

synchronously switch DS-0 traffic and ATM cells received in a frame.

38. **(Currently Amended)** The system of Claim 37, wherein ~~the~~ each service channel is two bytes in size, the software operable to repeat the frame at 125 microsecond intervals.

39. **(Previously Added)** The system of Claim 37, wherein the synchronous bus comprises a point-to-point link, the software further operable to repeat the frame at a defined interval on the point-to-point link.

40. **(Cancelled)**

41. **(Currently Amended)** The system of Claim 37, wherein the second plurality of service channels comprises a block of contiguous service channels. ~~the software further operable to transmit the ATM cell in a block of contiguous service channels.~~

42. **(Currently Amended)** The system of Claim 37, wherein the software is further operable to transmit traffic for an integrated services digital network (ISDN) connection in a ~~second set~~ third plurality of service channels of the frame.

43. **(Currently Amended)** A traffic processor for a line card of a telecommunications node, comprising:

a computer-readable medium; and

software stored on the computer-readable medium, the software operable to:

generate a frame comprising ~~a plurality of service channels and~~ an overhead portion having an internode communication channel ~~in~~ and a service traffic portion comprising a plurality of service channels;

~~to~~ generate control traffic destined for a disparate element in the telecommunications node, the control traffic comprising a control message free of addressing information; ~~, to~~

insert the control traffic into a slot in the internode communication channel associated with the disparate element; ~~, to~~

~~insert traffic received at a port into the service channels, and to~~

insert DS-0 traffic received at a port and a current channel associated signaling (CAS) value for the DS-0 traffic into every one of a first plurality of service channels in the frame;

insert an asynchronous transfer mode (ATM) cell received at a port into a second plurality of service channels in the frame associated with the disparate element for the ATM cell within the telecommunications node; and

transmit the frame on a point-to-point link of a synchronous bus.

44. **(Cancelled)**

45. **(Cancelled)**

46. **(Cancelled)**

47. **(Currently Amended)** The traffic processor of Claim 43, wherein the software is further operable to insert integrated services digital network (ISDN) traffic into a ~~set~~ third plurality of service channels in the frame.